

CLAIMS

1. A recording and reproduction disk control unit which controls recording and reproduction of digital data onto/from a disk-shaped recording medium that has a data recordable area where the digital data composed of either one or both of image data and voice data are recorded and one or more management information areas where recording management information employed for management of the digital data is recorded, comprising:

a data recording and reproduction means for recording digital data and recording management information onto the disk-shaped recording medium and reading the digital data and the recording management information from the disk-shaped recording medium;

an image/voice data management means for monitoring whether there is a room for recording of digital data by the data recording and reproduction means or not; and

a recording management information management means for temporarily holding recording management information and outputting the recording management information to the data recording and reproduction means when the image/voice data management means detects that there is a room for recording of the digital data by the data recording and reproduction means.

2. The recording and reproduction disk control unit as defined in Claim 1, wherein

the disk-shaped recording medium has two or more management recording areas, and

the data recording and reproduction means records recording management information in the two or more management information areas in turn when recording the recording management information onto the disk-shaped recording medium.

3. The recording and reproduction disk control unit as defined in Claim 2, wherein

the recording management information recorded on the disk-shaped recording medium includes recording recency information which indicates whether the recording management information is most newly recorded, as backup information.

4. The recording and reproduction disk control unit as defined in Claim 2, wherein

the recording management information recorded on the disk-shaped recording medium includes disconnection-during-recording information which indicates whether or not power disconnection of the disk recording and reproduction control unit is generated while the recording management information is recorded on the disk-shaped recording medium, as backup information.

5. The recording and reproduction disk control unit as defined in Claim 2, wherein

the recording management information recorded on the disk-shaped recording medium includes operational state information which indicates whether the recording management information is recorded on the disk-shaped recording medium during recording of digital data or not, as backup information.

6. The recording and reproduction disk control unit as defined in Claim 2, wherein

backup information, information concerning recording of the recording management information, is included in the recording management information recorded on the disk-shaped recording medium,

the backup information is not included in the recording management information temporarily held by the recording management information management means, and

the recording management information management means adds the backup information to the recording management information temporarily held by the recording management information management means to output to the data recording and reproduction means.

7. The recording and reproduction disk control unit as

defined in Claim 2, wherein

the recording management information recorded on the disk-shaped recording medium includes backup information as information concerning recording of the recording management information,

the recording management information temporarily held by the recording management information management means includes the backup information, and

the recording management information management means updates the backup information included in the recording management information temporarily held by the recording management information management means to output to the data recording and reproduction means.

8. The recording and reproduction disk control unit as defined in Claim 2, wherein

the recording management information management means selects the recording management information which is most newly recorded with no power disconnection generated during recording from recording management information recorded on the disk-shaped recording medium at startup of the recording and reproduction disk control unit.

9. A disk device having the recording and reproduction disk control unit as defined in Claim 1 built-in.